

Complete Listing of All Claims in the Application

645
1. (Once amended) A golf club shaft formed by winding a plurality of layers
2 around a mandrel with a main body having a body surface and a mandrel tip having a
3 tip surface that is recessed relative to the body surface of the main body of the mandrel,
4 wherein the mandrel is removed after curing, the golf club shaft comprising:
5 a layer of metal-containing prepreg wrapped at a tip of the shaft;
6 a layer of non-metal fiber prepreg wrapped adjacent to the layer of metal-
7 containing prepreg and throughout a length of the shaft; and
8 wherein the non-metal fiber prepreg is supported on the metal-containing
9 prepreg and forms a generally non-inflected inner surface throughout the length
B] 10 of the shaft.

1 2. (Original) The golf club shaft of Claim 1 wherein the layer of metal-containing
2 prepreg wrapped at the tip of the shaft comprises a first layer of metal-containing
3 prepreg and a second layer of metal-containing prepreg.

1 3. (Original) The golf club shaft of Claim 1 wherein the golf club shaft has a
2 mass of about 80 - 130 g.

1 4. (Original) The golf club shaft of Claim 1 wherein the golf club shaft has a
2 center of mass located at about 45-51 % when measured from the tip and expressed as
3 a ratio to an overall length of the golf club shaft.

5. (Once amended) A golf club shaft formed by winding a plurality of layers
around a mandrel that is removed after curing comprising:

a layer of metal-containing prepreg wrapped at a tip of the shaft;

a layer of non-metal fiber prepreg wrapped adjacent to the layer of metal-
containing prepreg throughout a length of the shaft, and

wherein the golf club shaft has an elasticity index (EI) value about 3.0 - 4.5
kgfm² at 200 mm from the tip.

6. (Original) The golf club shaft of Claim 1 wherein the layer of metal-containing
prepreg located at the tip of the shaft is an inner-most layer.

7. (Original) The golf club shaft of Claim 6 wherein the inner-most layer of
metal-containing prepreg is located along a length of the shaft between a tip of the shaft
and 40% of an overall length of the shaft.

8. (Once amended) The golf club shaft of Claim 6 wherein the layer of non-
metal fiber prepreg is wrapped over the inner-most layer of metal-containing prepreg.

9. (Original) The golf club shaft of Claim 1 wherein the layer of metal-containing
prepreg comprises a metal having a specific mass greater than 7g/cm³.

10. (Original) The golf club shaft of Claim 1 wherein the layer of metal-
containing prepreg contains a metal fiber.

1 11. (Original) The golf club shaft of Claim 1 wherein the layer of metal-
2 containing prepreg contains a metal powder.

1 12. (Original) The golf club shaft of Claim 11 wherein the metal powder is
2 dispersed in a synthetic resin sheet.

1 13. (Original) The golf club shaft of Claim 12 wherein the metal powder
2 comprises tungsten.

1 14. (Once amended) A golf club shaft formed by winding a plurality of layers
2 around a mandrel that is removed after curing comprising:
3 a layer of metal-containing prepreg wrapped at a tip of the shaft;
4 a layer of non-metal fiber prepreg wrapped adjacent to the layer of metal-
5 containing prepreg throughout a length of the shaft, and
6 wherein the metal-containing prepreg comprises a synthetic resin sheet
7 including epoxy resin.

1 15. (Canceled)

1 16. (Canceled)

1 17. (Previously added) The golf club shaft of Claim 1, wherein the metal-
2 containing prepreg and the non-metal fiber prepreg together form an inflected inner
3 surface.

1 18. (Previously added) The golf club shaft of Claim 17, wherein the inflected
2 inner surface has a through hole that is smaller in a portion defined by the metal-
3 containing prepreg than in a portion defined by the non-metal fiber prepreg.

1 19. (Re-presented – formerly Claim 1) A golf club shaft formed by winding a
2 plurality of layers around a mandrel that is removed after curing comprising:
3 a layer of metal-containing prepreg wrapped at a tip of the shaft; and
4 a layer of non-metal fiber prepreg wrapped adjacent to the layer of
5 metal-containing prepreg throughout a length of the shaft.

1 20. (Re-presented – formerly dependent claim 2) The golf club shaft of Claim 19
2 wherein the layer of metal-containing prepreg wrapped at the tip of the shaft comprises
3 a first layer of metal-containing prepreg and a second layer of metal-containing prepreg.

1 21. (Re-presented – formerly dependent claim 3) The golf club shaft of Claim 19
2 wherein the golf club shaft has a mass of about 80 - 130 g.

1 22. (Re-presented – formerly dependent claim 4) The golf club shaft of Claim 19
2 wherein the golf club shaft has a center of mass located at about 45~51% when
3 measured from the tip and expressed as a ratio to an overall length of the golf club
4 shaft.

1 23. (Re-presented – formerly dependent claim 5) The golf club shaft of Claim 19
2 wherein the gold club shaft has an elasticity index (EI) value about $3.0 \sim 4.5 \text{ kgf} \cdot \text{m}^2$ at

3 200 mm from the tip.

C 1 24. (Re-presented – formerly dependent claim 6) The golf club shaft of Claim 19
2 wherein the layer of metal-containing prepreg located at the tip of the shaft is an
3 inner-most layer.

2 25. (Re-presented – formerly dependent claim 7) The golf club shaft of Claim 24
2 wherein the inner-most layer of metal-containing prepreg is located along a length of the
3 shaft between a tip of the shaft and 40% of an overall length of the shaft.

1 26. (Re-presented – formerly dependent claim 8) The golf club shaft of Claim 24
2 wherein the layer of non-metal fiber prepreg is wrapper over the inner-most layer of
3 metal-containing prepreg.

1 27. (Re-presented – formerly dependent claim 9) The golf club shaft of Claim 19
2 wherein the layer of metal-containing prepreg comprises a metal having a specific mass
3 greater than 7 g/cm^3 .

1 28. (Re-presented – formerly dependent claim 10) The golf club shaft of Claim
2 19 wherein the layer of metal-containing prepreg contains a metal fiber.

1 29. (Re-presented – formerly dependent claim 11) The golf club shaft of Claim
2 19 wherein the layer of metal-containing prepreg contains a metal powder.

1 30. (Re-presented – formerly dependent claim 12) The golf club shaft of Claim
2 29 wherein the metal powder is dispersed in a synthetic resin sheet.

1 31. (Re-presented – formerly dependent claim 13) The golf club shaft of Claim
2 30 wherein the metal powder comprises tungsten.

1 32. (Re-presented – formerly dependent claim 14) The golf club shaft of Claim
2 30 wherein the synthetic resin sheet comprises epoxy resin.

1 33. (New) A golf club shaft formed by winding a plurality of layers around a
2 mandrel that is removed after curing comprising:

3 a layer of metal-containing prepreg that contains a metal fiber and is
4 wrapped at an innermost layer at a tip of the shaft; and

5 a layer of non-metal fiber prepreg wrapped adjacent to the layer of
6 metal-containing prepreg throughout a length of the shaft.

1 34. (New) The golf club shaft of Claim 33 wherein the layer of metal-containing
2 prepreg wrapped at the tip of the shaft comprises a first layer of metal-containing
3 prepreg and a second layer of metal-containing prepreg.

1 35. (New) The golf club shaft of Claim 33 wherein the golf club shaft has a mass
2 of about 80 - 130 g.

1 36. (New) The golf club shaft of Claim 33 wherein the golf club shaft has a
2 center of mass located at about 45~51% when measured from the tip and expressed as
3 a ratio to an overall length of the golf club shaft.

1 37. (New) The golf club shaft of Claim 33 wherein the golf club shaft has an

2 elasticity index (EI) value about $3.0 \sim 4.5 \text{ kgf} \cdot \text{m}^2$ at 200 mm from the tip.

1 38. (New) The golf club shaft of Claim 33 wherein the layer of metal-containing
2 prepreg located at the tip of the shaft is an inner-most layer.

1 39. (New) The golf club shaft of Claim 38 wherein the inner-most layer of
2 metal-containing prepreg is located along a length of the shaft between a tip of the shaft
3 and 40% of an overall length of the shaft.

1 40. (New) The golf club shaft of Claim 38 wherein the layer of non-metal fiber
2 prepreg is wrapper over the inner-most layer of metal-containing prepreg.

1 41. (New) The golf club shaft of Claim 33 wherein the layer of metal-containing
2 prepreg comprises a metal having a specific mass greater than 7 g/cm^3 .